

**IN THE UNITED STATES DISTRICT COURT  
FOR THE DISTRICT OF SOUTH CAROLINA  
CHARLESTON DIVISION**

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**IN RE: AQUEOUS FILM-FORMING  
FOAMS PRODUCTS LIABILITY  
LITIGATION**

MDL No. 2:18-mn-2873-RMG

**This Document relates to  
ALL CASES**

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**DEFENDANT 3M COMPANY'S REPLY BRIEF  
IN SUPPORT OF DEFENDANTS' MOTION FOR PARTIAL SUMMARY JUDGMENT  
ON THE SECOND AND THIRD ELEMENTS OF THE  
GOVERNMENT CONTRACTOR IMMUNITY DEFENSE**

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In its opening brief, 3M showed that it meets the second and third *Boyle* elements of the government contractor defense (“GCD”) as a matter of law, and Plaintiffs fail to show otherwise.<sup>1</sup> The long discussion of 3M’s alleged corporate malfeasance in Plaintiffs’ Opposition is not only disingenuous but immaterial to whether 3M is entitled to summary judgment under *Boyle*.

As to the second *Boyle* element, 3M showed in its opening brief that it is entitled to summary judgment because DoD placed all of 3M’s MilSpec AFFF products on DoD’s Qualified Products List (“QPL”) after determining that they conformed to the MilSpec. Plaintiffs’ only response is that in 1974, the military investigated information that one 3M product’s formulation had changed since qualifying under the MilSpec. But the record shows that the military then concluded that the product *did* conform to the MilSpec. Plaintiffs simply ignore that evidence.

As to the third *Boyle* element, 3M demonstrated that it is entitled to summary judgment because it is undisputed that the government continued using 3M’s MilSpec AFFF for decades even *after* 2000, when 3M announced its withdrawal from the AFFF market and EPA (building on the government’s prior knowledge) publicly identified potential risks of PFOS. Indisputably then, any information about those risks that 3M allegedly had concealed was not *material* to the government’s decision to use 3M’s MilSpec AFFF. Notwithstanding Plaintiffs’ unsupported assertions that 3M had earlier deceived the government and delayed the government’s PFAS response, Plaintiffs’ Opposition does not meaningfully respond to 3M’s continued-use argument.

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<sup>1</sup> Defendants previously showed that they meet the first *Boyle* element as a matter of law. As used here, “Def. Mem.,” Def. Reply,” and “Def. Ex. \_\_\_” refer respectively to Defendants’ Omnibus Memorandum (ECF 1965-1), Reply Memorandum (ECF 2141), and Exhibits in support of Defendants’ Motion For Partial Summary Judgment On The First Element Of The GCD; “3M. Mem.” refers to 3M’s Memorandum Of Law In Support Of Defendants’ Motion For Partial Summary Judgment On The Second And Third Elements Of The GCD (ECF 2347); “3M Ex. \_\_\_” refers to 3M’s exhibits to that memorandum and this reply; “Opp.” and “Opposition” refer to Plaintiffs’ Omnibus Opposition To Defendants’ Motion for Partial Summary Judgment on the Second and Third Elements (ECF 2409); and “Pl. Ex. \_\_\_” refers to Exhibits to that Opposition.

3M is entitled to summary judgment on the third *Boyle* element on this basis alone, regardless of any putative factual issues as to 3M's supposed knowledge and conduct at earlier points in time. In any event, as shown in its opening brief, 3M is also entitled to summary judgment on the third *Boyle* element because Plaintiffs cannot identify any material facts that were known to 3M but not to the government. The evidence Plaintiffs cite does not show otherwise.

Once a defendant moving for summary judgment on an affirmative defense under Fed. R. Civ. P. 56 carries its initial burden to produce evidence sufficient to support the defense, “the burden of production shifts back to the plaintiff who must come forward with specific facts showing that there is a genuine issue for trial.” *Brinkley v. Harbour Recreation Club*, 180 F.3d 598, 614 (4th Cir. 1999) (internal quotation marks omitted). When plaintiffs fail to satisfy that burden in response to a defendant's properly supported summary judgment motion—as Plaintiffs failed to do here—courts have not hesitated to hold that the GCD barred the plaintiffs' claims as a matter of law. *See, e.g., Ramey v. Martin-Baker Aircraft Co. Ltd.*, 874 F.2d 946, 950-51, 953 (4th Cir. 1989). Neither should this Court hesitate to enter summary judgment on the GCD for 3M.<sup>2</sup>

**I. 3M Meets The Second *Boyle* Element As A Matter Of Law Because 3M's MilSpec AFFF Products Conformed To The MilSpec Requirements.**

3M has shown that it meets the second *Boyle* element as a matter of law for each of two reasons: (1) the Navy placed each of 3M's MilSpec AFFF products on the QPL after testing them and determining that they conformed to the MilSpec, and (2) the military kept using 3M's products after qualifying them, never rejecting any of them for failure to conform to the MilSpec. *See* 3M

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<sup>2</sup> The appendix to Plaintiffs' Opposition purportedly identifies material issues of disputed fact, and Plaintiffs ask the Court to let them try those issues to a jury. Opp. 91 & App'x. But a party cannot defeat summary judgment just by averring (as the appendix does) that each element of the claims or defenses is disputed. *See Celotex Corp. v. Catrett*, 477 U.S. 317, 324, 331 (1986). Plaintiffs take issue with Defendants' statements of fact but do not explain which statements they dispute, nor do they explain why they dispute them “with reference to the location in the record.” L.R. 7.05(A)(4).

Mem. 4-8 & App’x. That evidence is sufficient to prove that 3M’s products “conformed to” the military’s “specifications.” *Boyle v. United Techs. Corp.*, 487 U.S. 500, 512 (1988).<sup>3</sup>

For all but one of the many 3M products on the AFFF QPL from 1970 to 2010, Plaintiffs make no effort to dispute the products’ conformance to the MilSpec. The one exception is 3M’s FC-206 Light Water, which was on the QPL from 1974 to 1978: Plaintiffs argue that “certain lots” of that product “deviated from the formula originally qualified”—specifically because the lots contained less fluorine than the lot that had been tested for qualification. Opp. 40. Plaintiffs infer that 3M’s MilSpec AFFF “cannot be said [to have] conformed at all times to” the MilSpec. *Id.*

But that evidence does not prove that FC-206 Light Water failed to conform to the MilSpec. Plaintiffs do not even say *which* MilSpec requirement was supposedly violated by FC-206 Light Water’s purportedly reduced total fluorine content. Instead, Plaintiffs point to a January 1977 memo from the NRL to NAVSEC suggesting that 3M’s fluorine-related “formulation variations violate the specification requirements.” Pl. Ex. 166 at -1716. But DoD’s subsequent investigation conclusively found no such violation. The Navy looked into FC-206 Light Water’s fluorine content and—as DoD explained in a November 1977 letter—concluded that any variation was unrelated to the MilSpec requirements, and that “[a]ll existing specification requirements for lot acceptance have been met for all 3M product lots delivered to the Government.” 3M Ex. 59 at 2. Navy testing also “revealed no incompatibility” between FC-206 Light Water and other MilSpec AFFF. *Id.*<sup>4</sup>

In short, Plaintiffs have not adduced evidence that would permit a jury to find that *any* 3M

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<sup>3</sup> Plaintiffs deny that this evidence proves the second *Boyle* element but just rehash their *Boyle*-element-one argument that the MilSpec did not specify the “fluorocarbon surfactant” to use. Opp. 33-34. As stated in the Telomer Defendants’ Reply, that is irrelevant to *Boyle*’s second element.

<sup>4</sup> Contrary to Plaintiffs’ contentions, FC-206 was never “removed from the QPL.” Opp. 41. Rather, FC-206 remained on the QPL until that version of the QPL was cancelled in January 1978, at which time 3M qualified FC-780 for placement on the new QPL. *See* 3M Ex. 60 at -0238, -0240.

MilSpec AFFF product failed to conform to the MilSpec. 3M is thus entitled to summary judgment on the second *Boyle* element as a matter of law.

**II. 3M Meets The Third *Boyle* Element As A Matter Of Law Because The Government Continued Using 3M's AFFF Products After It Knew Of The Alleged Defects.**

3M also has shown that it meets the third *Boyle* element as a matter of law because there is no dispute that the government continued using 3M's MilSpec AFFF for years after it knew of the alleged product risks, and thus any facts 3M allegedly withheld before that were not *material* to the military's decision to use those products. *See* 3M Mem. 19-24. In this way, the government's conduct proves that 3M did not conceal any "material circumstances" and 3M thus meets the third *Boyle* element. *Ramey*, 874 F.2d at 951 (holding that the third *Boyle* element was met as a matter of law because the government was aware of the "material circumstances" known to defendant).

Plaintiffs offer no meaningful response—in fact, they appear to agree with 3M on both the law and the facts (even as they deny 3M's conclusions). Plaintiffs acknowledge that the GCD requires a defendant to have disclosed "hazards that *might reasonably have affected* the government's decision about the use of" the defendant's product. Opp. 34-35 (emphasis added). Plaintiffs do not dispute that if allegedly concealed facts did not affect government decisions, a defendant's failure to disclose those facts does not defeat the GCD. *See In re Agent Orange Prod. Liab. Litig.*, 517 F.3d 76, 99-101 (2d Cir. 2008); *Glassco v. Miller Equip. Co.*, 966 F.2d 641, 643 (11th Cir. 1992). Although the government's knowledge in fact dates back to the 1970s, Plaintiffs agree that *no later than 2000*, 3M disclosed the alleged material risks of PFOS-containing AFFF to EPA, *see* Opp. 29, including the presence of PFOS in human blood, *id.* at 56, and 3M's use of PFOS in its AFFF, *id.* at 57.<sup>5</sup> It is uncontested that despite this information, the government kept

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<sup>5</sup> In 1998-2000, 3M also disclosed substantial information, including on the persistence of PFOS, its potential toxicity, and its potential to bioaccumulate. 3M Mem. 13-14; 3M Ex. 27 through 42.

using 3M's AFFF for nearly two more decades, even when it had access to other QPL-listed AFFF products. *See* 3M Mem. 10.<sup>6</sup> 3M thus meets *Boyle*'s third element as a matter of law.

Plaintiffs deny that conclusion without explanation, baldly asserting in a footnote that, “[t]o the extent that Defendants . . . argue that the information they withheld from the government would not have impacted [the government’s] knowledge or decision to discontinue use of . . . AFFF, the record disproves their contentions.” Opp. 35 n.134. Plaintiffs cite no record evidence (or legal authority) in support of this statement. Instead, Plaintiffs appear to contest 3M’s continued-use argument for the third *Boyle* element on the grounds that (1) 3M has not conceded that PFOS and PFOA actually cause human health effects, and (2) the government might have discontinued use of AFFF containing PFOS and PFOA sooner if 3M had warned it about PFOS/PFOA. As discussed below, these are purely rhetorical points with no legal effect. *See, e.g., Cadle Co. v. Hayes*, 116 F.3d 957, 960 (1st Cir. 1997) (need “more than effusive rhetoric” to defeat summary judgment).

**A. 3M Does Not Fail The Third *Boyle* Element Just Because PFOS And PFOA Have Not Been Proven To Cause Human Health Effects And/Or Because PFOS And PFOA Have Only Recently Been Subject To EPA Guidance.**

Plaintiffs ask: “how can it be that the government . . . knew that use of C8-containing AFFF posed a risk of harm to human life, yet continued to use it anyway, when the Defendants deny such a risk of harm ever existed?” Opp. 2. But there is no inconsistency in 3M’s position. As 3M told the Court (and federal public health officials have recognized), whether or not PFOS or PFOA *actually* causes human health effects at any level of exposure has not been scientifically established—and certainly not at the low levels at which the general population is exposed.<sup>7</sup> *See*

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<sup>6</sup> Indeed, Plaintiffs themselves contend that DoD’s decision to phase out PFOS-based AFFF was based not on these facts but on regulatory guidance issued by EPA in 2016. *See* Opp. 17-20.

<sup>7</sup> Plaintiffs quote 3M documents stating that AFFF is “safe,” Opp. 7, but in context such documents generally say that, based on current “scientific evidence,” PFOS/PFOA are safe at the “current or past levels” at which people are exposed to them, *e.g., id.* at 7 n.31 (full quote from 3M website).



3M Mem. 16-17. But the government kept using AFFF containing PFOS even after 3M indisputably disclosed (and the government knew of) *potential* health risks, including all the information Plaintiffs cite to allege that the products are defective. *See id.* at 8-14, 19-20. DoD kept using 3M's AFFF after EPA expressed to DoD in 2000 its "serious concern for potential future risk to humans . . . if PFOS continues to be produced, released, [and] built up in the environment," Def. Ex. 97 at -943, and called PFOS "persistent," "bioaccumulative," and "toxic," *id.* at -937 to -938. DoD kept using 3M's AFFF for years after EPA issued its Provisional Health Advisories ("PHA") in 2009, Def. Ex. 117, even though confirmed PFOS levels at DoD facilities exceeded the PHAs, Def. Ex. 122, at 2; *see also id.* at 1, 3 (2011 DoD Risk Alert identifying potential "human health" risks of PFOS but advising that PFOS-based AFFF could still be used). 3M has shown that it meets the third *Boyle* element based on that evidence that the potential "risk to humans" was immaterial to the government's decision to use the product. Def. Ex. 97 at -943.

Absurdly, Plaintiffs claim that 3M fails the third *Boyle* element (and a material fact dispute precludes summary judgment) because 3M has not conceded that PFOS/PFOA actually *do* cause adverse health effects at all levels of exposure. That is not the law (and Plaintiffs cite no authority): a contractor need not admit a plaintiff's allegations of design defect before it may invoke the GCD. Plaintiffs purport to distinguish "every case cited by Defendants" on the ground that the GCD applied in those cases only to the extent that the existence of a defect was undisputed, Opp. 1-2; but Plaintiffs concede that in some of these cases, the defendants admitted only that the product had "the *potential* to cause harm." *Id.* at 2 (emphasis added). In any event, courts have recognized that the GCD may apply when the extent of the danger posed by a product is disputed or unknown. *See, e.g., In re Agent Orange Prod. Liab. Litig.*, 597 F. Supp. 740, 746 (E.D.N.Y. 1984) (cited at 3M Br. 22) ("the factual issues [are] unresolved by the scientific communities addressing them").

Similarly unavailing are Plaintiffs' efforts to conflate government *regulation* with the government *knowledge* that matters under *Boyle*. See 487 U.S. at 512. For instance, Plaintiffs suggest that EPA's decision not to issue regulatory guidance on PFOS/PFOA until its 2016 non-binding lifetime health advisories somehow proves that the government was misled by 3M about the safety of AFFF both before and after 2000. See Opp. 24 ("3M . . . possessed knowledge [it] failed to disclose," and "it cannot have been before 2016, when the EPA . . . issued its 2016 [Lifetime Health Advisories], that DoD had actual knowledge of the dangers posed by PFOA and PFOS to humans"). But what matters under *Boyle* is whether the government knew the allegedly material risks of PFOS/PFOA that were known to 3M. See *Ramey*, 874 F.2d at 951 & n.10. That issue of government knowledge is entirely distinct from whether the government chose to make a policy decision to issue regulations or guidance based on its interpretation of the risks (in the context of scientific debate over PFOS/PFOA and political debate over regulatory policy).<sup>8</sup>

3M has shown that EPA and DoD long knew of the alleged potential risks of PFOS/PFOA—and at any rate indisputably knew them by 2000—and Plaintiffs never even purport to identify specific factual knowledge of material risks of PFOS/PFOA that 3M withheld from the government after 2000. 3M thus meets the third *Boyle* element, for the information that Plaintiffs claim (incorrectly) that 3M concealed from the government before 2000 was demonstrably immaterial to the government's decision-making—as shown by the government's decision to continue using 3M's AFFF well after 2000. See, e.g., *In re Agent Orange*, 597 F. Supp. at 849-50 (GCD applies if government "would not have acted any differently even if it had known" the risks). As the record shows, both before and after 2000, the government exercised its discretion to decide

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<sup>8</sup> EPA must prioritize which drinking water contaminants to regulate. See 42 U.S.C. § 300g-1(b)(1)(C). It does not regulate every contaminant posing a potential health risk at some level.

that the military need for using AFFF containing PFOS or PFOA outweighed potential risks. *See, e.g.*, Def. Ex. 24 at -970, Def. Ex. 95 at -663 (“fire safety advantages . . . greater than the risks”).

**B. 3M Does Not Fail The Third *Boyle* Element Based On Plaintiffs’ Speculation That The Government Might Have Regulated PFOS And Stopped Using 3M’s MilSpec AFFF Products Sooner Than It Did.**

Despite that evidence, Plaintiffs assert that 3M withheld material information that would have impacted government decision-making. *See* Opp. 58 (if “3M [had] been transparent with government concerning the dangers posed by C8-containing AFFFs, then government’s decision making with respect to C8-containing AFFFs would have been different”). In particular, Plaintiffs claim that, “had the government known of the dangers posed by long-chain AFFF earlier, it would have discontinued using it sooner.” *Id.* at 35. Plaintiffs do not and cannot tie these bald assertions to specific evidence that the government lacked material knowledge of particular alleged risks.<sup>9</sup>

In any event, 3M adduced uncontroverted evidence that forecloses Plaintiffs’ theory: once the government indisputably came to “know[] of the dangers posed by long-chain AFFF” in the 1998-2000 timeframe, Opp. 35, the government did *not* “discontinue[] using it,” *id.* Therefore—even if the record did not also show that the government knew (and 3M disclosed) AFFF’s alleged risks before 1998-2000—no reasonable jury could find that 3M concealed knowledge that would have been *material* to government decision-making. *See* 3M Mem. 19-24. Plaintiffs’ “conclusory allegations [and] speculation” that the government would have stopped using AFFF containing PFOS sooner than it did are “insufficient to defeat summary judgment.” *Open Risk, LLC v. Microstrategy Serv. Corp.*, 876 F.3d 518, 528 (4th Cir. 2017).

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<sup>9</sup> Although Plaintiffs repeatedly suggest that EPA would have regulated PFOS/PFOA sooner had it known that those chemicals were present in the blood of the general population, they do not explain why EPA took no action in response to published research dating back to the 1970s showing that PFOS and/or PFOA may be present in the blood of the general population, and indeed did not publish regulatory guidance on PFOS/PFOA until four decades later. *See infra*, Sect. III.A.

Without record support for their theory, Plaintiffs string together speculative inferences about what hypothetically might have happened. Plaintiffs hypothesize that DoD was powerless to stop use of PFOS- and PFOA-based AFFF until EPA issued guidance on those chemicals, supposedly because “it is the DoD’s policy to rely on the EPA” for policy regarding “hazardous materials.” Opp. 17-18. Plaintiffs then assert that 3M’s alleged failure “to disclose complete and accurate information” for decades *before* 2000 in fact “delayed [EPA’s] regulatory assessment and response to the threat posed by PFOS and PFOA,” so it took EPA until 2016 to respond. *Id.* at 42-43 (internal quotation marks and brackets omitted); *see also id.* at 22-24. Plaintiffs suggest that, because it supposedly delayed EPA guidance, 3M’s alleged failure to disclose then delayed DoD’s decision to stop using AFFF containing PFOS until the late-2010s (after EPA responded)—so DoD’s continued use of 3M’s AFFF after 2000 proves nothing, and 3M’s alleged failure to disclose information before 2000 thus *caused* DoD to keep using 3M AFFF for years after 2000.

At every step, that string of inferences is either unsupported or contradicted by the evidence, and for at least three independent reasons, cannot defeat summary judgment. *First*, Plaintiffs cite no evidence (or legal authority) that DoD had to wait for EPA to issue (non-binding) guidance in 2016 and could not have discontinued use of AFFF containing PFOS immediately in 2000 (or at any other point) based on information then known to DoD, including information communicated by EPA. To the contrary—as Defendants previously explained—the record shows that DoD at all times could decide what products to use (and how to use them) and always retained the discretion to revise or amend the MilSpec to prohibit or limit use of PFOS- and PFOA-containing AFFF if it chose to do so. *See* Def. Reply 15-16; Def. Ex. 17 (Darwin Dep.) 945:6-11 (NAVSEA “has complete discretion to have set [the PFOS/PFOA limit] at zero if [it] wanted to.”). *Second*, Plaintiffs’ assertion that 3M could have disclosed information prior to 1998 that would

have caused EPA to regulate PFOS/PFOA sooner is sheer “speculation” that “[cannot] defeat summary judgment.” *Open Risk*, 876 F.3d at 527. Moreover, the assertion is implausible, for EPA failed to regulate PFOS/PFOA for decades despite everything it knew about the fundamental properties of PFAS and potential environmental and health risks of those chemicals. In fact, EPA *still* has not established final regulations despite everything it now knows. *Third*—and as discussed further below—the record evidence disproves Plaintiffs’ allegation that 3M knew but failed to disclose material risks of PFOS/PFOA even before 1998. Plaintiffs cannot “pile inferences on inferences” (each of them unsupported) to avoid summary judgment. *Houchens v. Am. Home Assur. Co.*, 927 F.2d 163, 167 (4th Cir. 1991). 3M thus meets the third *Boyle* element.

### **III. 3M Independently Meets The Third Boyle Element As A Matter Of Law Because 3M Knew Of No Material Risks That Were Unknown To The Government.**

3M has shown that it also meets the third *Boyle* element for the independent reason that Plaintiffs cannot identify material facts about the alleged “dangers” of PFOS/PFOA or AFFF that were “known” to 3M “but not to the United States.” *Boyle*, 487 U.S. at 512; *see* 3M Mem. 24-28. As set forth in Defendants’ and 3M’s prior briefing, the government has long known (and 3M long ago told it) the material facts about the purported risks of PFOS/PFOA and AFFF that 3M allegedly concealed, *see* Def. Mem. 19-34; 3M Mem. 8-16, including that PFOS/PFOA are persistent and mobile in the environment, *e.g.*, Def. Ex. 58 at 17; may contaminate drinking water, *e.g.*, Def. Ex. 65 at 1, 5; do not fully biodegrade, *e.g.*, Def. Ex. 50 at 5; and tend to bioaccumulate, *e.g.*, Def. Ex. 68 at 589. In particular, the government has known of the presence of PFOS or PFOA in human blood, *see* 3M Mem. 15-16, and of animal studies showing that PFAS potentially are toxic and even lethal at high doses, *see* 3M Mem. 9—indeed, 3M’s own scientists published research in the 1980s showing that PFAS were potentially toxic in animals and bioaccumulative, *see* 3M Ex. 20, Def. Ex. 68. That extensive record of government knowledge alone proves that 3M meets the third

*Boyle* element. *See Ramey*, 875 F.2d at 951 & n.10 (affirming summary judgment for defendant on GCD and holding that Navy’s prior knowledge of product risks proved third *Boyle* element).

Despite the many pages of briefing Plaintiffs devote to constructing their counter-narrative of how 3M supposedly concealed the alleged dangers of PFOS- and PFOA-containing AFFF from the government, Plaintiffs offer little actual response to 3M’s arguments or evidence. In particular, Plaintiffs repeatedly insist that 3M cannot invoke the GCD because 3M allegedly told the government that PFOS and PFOA were “safe,” *e.g.*, Opp. 4, and “downplayed” the risks of using AFFF, *e.g.*, *id.* at 53, even though 3M already has explained why such allegations misrepresent the record and fail to refute the third *Boyle* element. As Plaintiffs concede, *see* Opp. 36-37, *Boyle* requires a manufacturer like 3M to warn the government only to the extent the manufacturer had actual knowledge of factual information about the risks of using a product—it does not require the manufacturer to communicate what the manufacturer “should have known.” *E.g.*, *Miller v. Diamond Shamrock Co.*, 275 F.3d 414, 422 (5th Cir. 2001). Thus, *Boyle* does not require a manufacturer to draw those conclusions from the facts that Plaintiffs now argue, in hindsight, 3M or the government should have drawn. Nor does it require a manufacturer to warn the government of any particular conclusion that may be drawn from the known facts, or to offer any policy recommendation for responding to them. But that is what the law would have to require for Plaintiffs to avoid the GCD based solely on 3M’s alleged failure to warn the government that its MilSpec AFFF products are “unsafe.” 3M explained in its opening brief that Plaintiffs have misapplied the law on that score, *see* 3M Mem. 18-19, 26-27, and Plaintiffs offer no response.

To the extent that Plaintiffs do try to argue that 3M knew of material facts about the risks of PFOS/PFOA or AFFF that were neither disclosed nor otherwise known to the government, they rely on interpretations of the evidence that are demonstrably false, as shown below.

**A. 3M Did Not Conceal The Presence Of PFOS In Human Blood.**

Describing it as “perhaps the most critical piece of evidence,” Opp. 7, Plaintiffs claim that 3M knew over twenty years before the government that PFOS was the organic fluorine that Guy and Taves identified in the 1970s in blood samples from the general population, and that 3M concealed that information from the government until 1998, *see id.* at 43-46. Plaintiffs point to an internal memo by 3M’s Dr. Richard Newmark, which concluded that the chemical spectra identified by Guy and Taves “resembled” PFOS “most closely,” *id.* at 45; Plaintiffs allege that 3M should have disclosed this at various times in the 1980s and 1990s but did not, *id.* at 55-56.

That evidence simply does not support the cover-up Plaintiffs want to portray, and is consistent with 3M’s position that the government knew everything relevant that 3M knew at the time. *See* 3M Mem. 15-16, 26-27. As an initial matter, Plaintiffs’ argument presupposes the false premise that *presence* of a substance equates to *harm*. *See*, e.g., Opp. 7-12. That is incorrect: many substances present in drinking water and/or human blood are unregulated and at low levels pose no known risks to people. In any event, Dr. Newmark testified that he did not definitively identify the compound Guy and Taves found, but only approximated which one of ten 3M fluorochemicals “most closely” resembled it. *See* 3M Ex. 61 (Newmark Dep.) 75:18-76:9; 205:15-206:14. That observation added nothing material to what the public knew from Guy and Taves’ published research in 1976 identifying the compound as a PFOA or PFOS derivative. Plaintiffs say that Guy and Taves’ article “makes *no* reference to PFOS,” Opp. 46, but that ignores the substance of their article, which *did* state that their findings were consistent with a “sulfonic acid derivate,” 3M Ex. 47 at 129, *i.e.*, a chemical like PFOS. Plaintiffs also misleadingly suggest that Dr. Newmark’s memo contradicts 3M’s claim that PFOS could not be studied in the general population until new analytical methods were invented in the 1990s and 2000s, Opp. 45, but the simple experiment Dr. Newmark ran to profile ten 3M chemicals was not even testing blood samples and shed no light

on the extent to which low levels of PFOS existed in the blood of the general population. As EPA toxicologist Christopher Lau wrote, the compound Guy and Taves discovered was “identified as PFOS or PFOA” in the 1970s and 1980s, but “[t]he extent of human exposure to these chemicals was not confirmed or elaborated upon until the turn of the twenty-first century when significant advances in analytical chemistry enabled routine detection . . . in the sub-ppb range.” 3M Ex. 62 at 5. 3M’s internal scientific research from the 1970s would not have materially added to the government’s knowledge at that time.

**B. 3M Did Not Conceal Potential Health Effects Of PFOS Or PFOA.**

Plaintiffs also claim that 3M has known for decades that PFOS/PFOA may have human health effects but has concealed that knowledge by publicly declaring that PFOS/PFOA are “safe.” *See* Opp. 5-7, 47-57. Plaintiffs’ story disregards undisputed evidence and is internally inconsistent. They claim that PFAS toxicity studies performed by the government (and cited by Defendants as proof of government knowledge of potential risks) failed to provide the government with “knowledge of the potential harm to humans,” Opp. 26; *see id.* at 29, yet they also claim that 3M’s own similar studies show that 3M knew PFOS to cause human health effects, *id.* at 47, 49. Plaintiffs also disregard evidence of 3M’s disclosures to the government and to the public. Notably, 3M showed in its opening brief that Plaintiffs had accused 3M of concealing monkey studies that 3M in fact shared with the government, 3M Mem. 25; 3M Ex. 17, yet Plaintiffs *still* rely on those studies to suggest that 3M concealed what it knew from the government, Opp. 47.

To the extent Plaintiffs do acknowledge 3M’s disclosures to EPA and DoD dating back decades, Plaintiffs try to diminish their importance on the theory that 3M “downplayed” the health risks of PFOS/PFOA. *See, e.g., id.* at 53-55. But as 3M reiterated above (*supra* p. 11), even if true, Plaintiffs’ charge would not defeat 3M’s showing that 3M disclosed and/or the government was aware of the predicate *factual* information that 3M allegedly “downplayed.” In essence, Plaintiffs



claim that the GCD does not apply because 3M has not conceded Plaintiffs’ own allegations on the health effects of PFOS/PFOA. *See supra* pp. 5-7. But Plaintiffs not only fail to offer evidence that 3M knew those alleged “facts” to be true for decades—they do not explain how 3M ever knew of purported health effects of PFOS/PFOA when indisputably, even today, the science has not established that PFOS/PFOA cause health effects. *See* 3M Mem. 16-17.

Plaintiffs also misleadingly argue that a March 2006 Consent Agreement between EPA and 3M “*proves*” that 3M “withheld information from the government”—and shows that “EPA was deprived of substantial risk information regarding PFOS and PFOA”—because 3M purportedly agreed to pay significant penalties for allegedly failing to report information to EPA in violation of the Toxic Substances Control Act (“TSCA”) Section 8(e). *Opp.* 29-30. That claim is meritless. The Consent Agreement, 3M Ex. 63,<sup>10</sup> resulted from a years-long self-audit of 3M’s compliance reporting procedures, *see id.* ¶ 3—including reporting unrelated to either PFAS or TSCA Section 8(e), *cf. id.* ¶¶ 9-63—and the stipulated penalties were for each study that 3M elected to disclose under a broad reading of the current reporting standards, *see id.* ¶¶ 3, 85. Thus, Plaintiffs are wrong that the penalties were for reporting violations. To the contrary, under the Consent Agreement, 3M did “not acknowledge or admit that these items require reporting under 8(e),” and EPA “made no substantive determination regarding” whether the items required reporting under Section 8(e). *Id.* ¶¶ 75, 78, 81. Plaintiffs are also wrong to infer that EPA had previously lacked the PFAS-related information that 3M disclosed: even to the extent the specific disclosures were “previously unreported,” that does not mean the government was unaware of the

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<sup>10</sup> Although 3M submits the Consent Agreement to the Court to respond to Plaintiffs’ unfair characterization of it, the Consent Agreement is by its own terms “not admissible as evidence against 3M.” Ex. 63 ¶ 8. 3M does not waive and expressly reserves its position and all arguments that the Consent Agreement should be excluded from evidence, including but not limited to under the terms of the Consent Agreement and all applicable provisions of the Federal Rules of Evidence.

information. Plaintiffs neither connect the unreported information to any specific material facts about PFAS nor explain why 3M's reporting of the information as part of its audit did not alter DoD's and EPA's approach to PFAS at that time. The Consent Agreement is another example of Plaintiffs' failure to characterize record evidence fairly, and is irrelevant to the third *Boyle* element.

**C. The Fact That Individual Government Employees Claimed To Lack Certain Information Does Not Refute 3M's Showing Of Government Knowledge.**

Lastly, Plaintiffs contend that 3M ignored evidence that the government did not know of hazards posed by 3M's AFFF, Opp. 57, but the evidence they cite relates only to two Navy officials who testified that until 2000, they were personally unaware of the exact fluorosurfactant used in 3M's AFFF, *id.* That testimony creates no genuine dispute as to the *government's* knowledge. Knowledge may be imputed to the government for purposes of the GCD even if some government employees, officials, or agencies lack knowledge—there is no requirement that those two specific Navy officials know. *See Miller*, 275 F.3d at 422-23 (“institutional knowledge” of “lower echelons” of government was “knowledge of the military”); *In re Agent Orange*, 597 F. Supp. at 796 (“[I]t is appropriate to charge the United States with the knowledge of any responsible employees who could reasonably be expected to alert the government.”). And in fact, the government *did* know before 2000 that 3M's AFFF contained a PFOS derivative. *See* 3M Mem. 12; Def. Ex. 67 at -656.<sup>11</sup>

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In sum, 3M meets the GCD as a matter of law. Accordingly, the Court should enter summary judgment for 3M to the extent that Plaintiffs' claims arise from MilSpec AFFF.

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<sup>11</sup> In any event, the identity of PFOS as a PFAS that 3M used in AFFF is irrelevant to government knowledge of AFFF's risks, *see* 3M Mem. 27 n.14, for Plaintiffs allege that other “C8” chemicals (at least including PFOA) pose the same risks and render AFFF “defective,” Opp. 2 n.13.

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Respectfully submitted,

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**CERTIFICATE OF SERVICE**

I HEREBY CERTIFY that on July 1, 2022, I electronically filed the foregoing document with the Clerk of the Court using CM/ECF. I also certify the foregoing document is being served this day on all counsel of record in this case via transmission of Notice of Electronic Filing generated by CM/ECF.

/s/ Michael A. Olsen

Michael A. Olsen